

---

# ***South Dakota Alliance for Distance Education***

## ***Evaluation Report Addendum***

Mark Hawkes, Ph.D.  
Dakota State University  
820 North Washington Ave.  
Madison, SD 57042

Gloria Steele, M.S.  
Technology Innovations In Education  
1925 Plaza Blvd.  
Rapid City, SD 57702

March, 2004

---

## South Dakota Alliance for Distance Education Evaluation Report—Addendum March, 2004

### Introduction

In June 2003, a final evaluation report of the activities related to the work of the South Dakota Alliance of Distance Education (SDADE), funded by the Star School grant program was completed by a seven-member program evaluation team from Technology, Research, and Evaluation Systems of Cooper City, FL. The evaluation profiled progress on 23 objectives identified by the South Dakota Department of Education as outcomes of work supported by the Star Schools federal grant. Using a variety of data collection and analysis methods, the evaluation team gathered both formative and summative data on the SDADE program.

While the evaluation report showed that the majority of program objectives were met, there were a small number of sub-objectives that had not been completed due to a variety of circumstances. The SD Department of Education was granted an extension of services so that these components of the program could be completed. The continuation of the project required ongoing evaluation. This evaluation report addendum speaks to the completion of 16 final program tasks. In short, the evaluation data shows that all final program tasks are completed and/or on the route to completion. This report, while serving a general audit function, also describes some of the impacts and consequences of these program activities while identifying agents of task completion and evaluation source information.

### Methods

The gathering of information related to SDADE program activities involved inquiry to various sources, and the use of several approaches and methods. Primary evaluation methods include: observation, participant logs, participant questionnaire, semi-structured interview, electronic and traditional document and report analysis, and focus groups.

The table below shows each of the final tasks completed via contract extension. An activity status report column describes task-related actions, outcomes, and impacts. The third column denotes contractors responsible for each task—if it was other than the personnel at the SD Department of Education. The final column identifies information sources. A short summary concludes the evaluation addendum.

Objective	Activity Status Report	Agents/Contractors	Information Sources
<b>1.1b</b>  Produce and distribute pamphlets and brochures dealing with SDADE, the DDN or Distance Education.	<p>The first of the SDADE project goals focuses on helping South Dakotans understand and accept the Digital Dakota Network (DDN). Initially, this activity focused on the promotional aspect of DDN development, which included familiarizing state constituents with the system and demonstrating how it is used for instructional support in their schools. Both print and digital media coverage of the DDN has been significant (see primary evaluation report)</p> <p>To improve the quality of use of the DDN, these print materials are more instructional than promotional and are intended to serve a more narrow audience of DDN users—teachers and school leaders. The activities that are a part of 1.1b and 1.3a include the design of brochures that will promote DDN learning opportunities to students and posters that will</p>	Dakota Interactive academic Link (DIAL) Consortia	Tracy Vik, DDN-IT Curriculum Coordinator/Instructor, Dakota Interactive Academic Link (DIAL), Platte, SD

Objective	Activity Status Report	Agents/Contractors	Information Sources
<p><b>1.3a</b></p> <p>Produce informational brochures for parents that explain DDN and distance Education in SD.</p>	<p>serve as “job aids” for teachers using DDN facilities.</p> <ul style="list-style-type: none"> <li>• Poster: 8.5 x 11, identifying DDN interaction options (1000)</li> <li>• Poster: 14 x 20, step-by-step instructions for operating the system (200, one to be placed in every DDN studio statewide)</li> <li>• Brochures: tri-fold, a packet to be sent to every school district (1000)</li> </ul> <p>A rough draft of these products has been developed. Pending approval by the State Department of Education Office of Curriculum, Technology and Assessment, SD State Central Duplicating will print the materials. Product distribution is tentative for April 30, 2004.</p>		
<p><b>1.4a</b></p> <p>Plan and offer abbreviated DTL academies for community members who are likely to use newly installed DDN classrooms</p>	<p>On March 27, 2004 the first annual South Dakota Entrepreneurs Expo was held at Augustana College in Sioux Falls, SD. The daylong event featured panel discussions, interactive workshop sessions, and informal networking opportunities. One of the primary sponsors of the Expo was the SD Department of Education and Dakota Interactive Link (DIAL) both of whom have promoted the use of the DDN as a venue for reaching out to distance populations with services other than those provided by the K-12 community for course delivery.</p> <p>An additional Expo partner is University of Sioux Falls (USF) Center for Women. The Center For Women strongly influenced the Expo so that many of the participants were women who were small business innovators. Subsequently, the breakout sessions spoke to themes that were uniquely suited to women. Participants (about 120) in the days’ events were active, involved, and very satisfied with the proceedings. Session and event evaluation forms that were returned by the participants gave high marks to the exhibits, variety of topics, quality of presentations, and competence of presenters.</p> <p>The link to distance education and SDADE is in the promotion of “Business Success Workshops” provided via the DDN to women entrepreneurs in areas such as business visioning, legal issues, marketing, and customer services. These half-day workshops are provided for free by the University of Sioux Falls. The first workshop series started in the spring of 2003 and bridged to small groups of participants at several distant locations (i.e., Mission, Lemmon, Redfield) in the state via the DDN. The USF Center For Women became partners with DIAL under their <i>Business Success Activities</i> initiative, which</p>	<p>Dakota Interactive Academic Link (DIAL) Consortia</p>	<ul style="list-style-type: none"> <li>• Shannon Amiotte, SDADE Project Manager, Office of Curriculum, Technology &amp; Assessment, SD Department of Education</li> <li>• Dr. Tricia Cole Interim Director, Center For Women University of Sioux Falls 1101 W. 22<sup>nd</sup> St. Sioux Falls, SD 57042</li> <li>• Rebecca Skroch Assistant Program Manager, Center for Women University of Sioux Falls 1101 W. 22<sup>nd</sup> St. Sioux Falls, SD 57042</li> <li>• Darla Newborg U.S. Small Business</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>focuses on promoting entrepreneurship in rural South Dakota. The workshop series, now in its fourth iteration, incurs no line or bridging fees thanks to the SD Department of Education and SDADE who waive these fees for the workshops. The workshops may be one of the most unique and productive partnerships formed that do not include K-12 or public higher education participants.</p>		<p>Administration South Dakota Business Office 110 S. Phillips Ave. # 200 Sioux Falls, SD 57104 605-330-4243</p> <ul style="list-style-type: none"> <li>Tracy Vik Program Specialist, Dakota Interactive Academic Link (DIAL), Platte, SD</li> </ul>
<p><b>1.4c</b></p> <p>Install a number of DDN classrooms that are education resources for schools teachers &amp; students.</p>	<p>During the initial grant cycle for SDADE, contracts were awarded to four parks, museums, science centers and other organizations within South Dakota that provide K-12 educational programs for the development of distance learning programs. In addition, two-way video conferencing equipment was installed in each location for the delivery of their programs over the Digital Dakota Network. A second RFP was made available Fall 2003, resulting in the establishment of one additional site, the Mammoth Site of Hot Springs. Following the installation of equipment for the DDN studios at the Mammoth Site at Hot Springs, Mount Rushmore National Memorial, the Outdoor Campus, USDA Forest Service and the Washington Pavilion in Sioux Falls, technical assistance and training was provided to personnel at each site by staff from the Office of Curriculum, Technology and Assessment, SD Department of Education. During the time period of Fall 2002 and Fall 2003, staff from each partner site traveled to one of three DDN studio locations to participate in face-to-face and distance training. The training sites were Pierre, Sioux Falls Washington Pavilion, and Mt. Rushmore National Memorial. The content of these trainings included:</p> <ul style="list-style-type: none"> <li>DDN system operations</li> <li>teaching techniques for using the DDN system</li> <li>awareness of the South Dakota state academic content standards and their alignment to curriculum associated with individual partner educational programs</li> </ul> <p>All of the established DDN community classrooms under this objective are offering programs Spring 2004, as described in Objective 3.1a. During the South Dakota TIE Conference, April 2004, these classrooms will be bridged to the convention center so staff</p>	<p>Office of Curriculum, Technology &amp; Assessment, SD Department of Education</p>	<ul style="list-style-type: none"> <li>Mark Heilman, Curriculum Technology Specialist, Office of Curriculum, Technology &amp; Assessment, SD Department of Education</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>can share their instructional programs with conference participants. Two of the established DDN classrooms, the USDA Forest Service and the Hot Springs Mammoth Site are pursuing options for making their programs available nationally.</p>		
<p><b>2.2a</b></p> <p>Plan and implement a DE conference dealing with Distance Education in SD.</p>	<p>This objective was completed Spring 2003 through inclusion of South Dakota Department of Education personnel on the South Dakota TIE Conference program. A variety of conference program offerings were led by SD DOE staff and their partners, many of which focused on the DDN system, including:</p> <ul style="list-style-type: none"> <li>• Videoconferencing Adventures: It's a Small World After All</li> <li>• How Do I Use the DDN With Elementary Students?</li> <li>• Tips and Tricks for Presenting Special Projects Over the DDN</li> <li>• SDADE Curriculum Project on Data Collection and Analysis with the TI-83/CBL</li> <li>• The State of the DDN (2 sessions)</li> <li>• Evaluation of the South Dakota Alliance for Distance Education</li> <li>• Distance Education-Lab Based Electronics for High School Students</li> <li>• NASA Share-a-Thon</li> <li>• SD Parks, Science Center and Museums Join the DDN (2 sessions)</li> <li>• Question/Answer Session for VTEL (2 sessions)</li> <li>• Using the DDN with Elementary Students</li> <li>• Facilitators-The Key to Success of Distance Education Classes</li> <li>• Geography via Distance</li> <li>• Distance Learning: Across America and Beyond</li> <li>• Integration of Technology and Distance Education in South Dakota Schools: Perceptions of Teachers and Students</li> <li>• Leviathan Voices: Connecting Across the Divide</li> <li>• Teaching Special Education Families via the Digital Dakota Network</li> <li>• DDN Video Scheduling—How To's, Tips &amp; Pointers</li> </ul> <p>Overall the TIE Conference was rated "Very Good to Excellent" for value, relevance, and quality of sessions. 477 responses were sorted and analyzed to determine the most frequently favored sessions/topics, of which DDN and NASA emerged in the top seven. Although this objective is complete, the program agenda for TIE 2004 includes a variety of</p>	<p>South Dakota Department of Education</p> <p>Technology &amp; Innovations in Education Office (TIE)</p>	<ul style="list-style-type: none"> <li>• Judy Butterbaugh, TIE 2003 Conference Coordinator</li> <li>• TIE 2003 Conference Evaluation Report</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	sessions/topics related to Distance Education and specifically to work associated with the SDADE Project.		
<p><b>3.1a</b></p> <p>Develop several “alternative” classroom designs for DDN class rooms, evaluate and publish results</p>	<p>In the latter part of 2002 and during 2003, five contracts were awarded to parks, museums, science centers and other organizations within South Dakota to provide K-12 educational programs for the development of distance learning programs. Those sites included the Mammoth Site at Hot Springs, Mount Rushmore, the Outdoor Campus, USDA Forest Service, and the Washington Pavilion in Sioux Falls. The activity of each of these sites is briefly profiled here followed by a summary of the opportunities and challenges that accessing and using DDN Technology had for them.</p> <p><b>Mammoth Site of Hot Springs</b> Mammoth received their DDN equipment in October 2003. A faulty document camera kept the unit from being fully functional until January 2004. On January 28, 2004 the Mammoth Site offered its first DDN delivered program to students at Hot Springs Elementary School as a “pilot” for their equipment. The site offers two programs at the elementary level, <i>Fossils!</i> and <i>Sinkhole-in-a-Glass</i>, and two programs at the middle and secondary levels <i>Osteology</i> and <i>Be a Paleo Detective!</i> Each program runs approximately 45 minutes in length and includes PowerPoint slides and video footage of the bone bed. Hands-on materials are shipped to the teacher in advance. To date, programs have been delivered to 9 different classes in 6 different schools to a total of 217 students. Those schools include, Hot Springs, Madison, Phillip, Wessington and Freeman. The equipment contract for the Mammoth Site expires at the end of March 2004. But, they are applying to have this resource over the next three years pending approval from DECA.</p> <p><b>Mount Rushmore</b> The Mount Rushmore National Memorial has had their interactive video equipment for about a year and a half. They offer five presentations that are targeted mainly at grades 3 through 5 and addressing history and social studies content standards. However, educational programming is highly customized. The educational outreach coordinator and the teacher(s) bridging to the Monument work closely together to determine what content and instructional strategies will work best to engage the students and supplement the ongoing curriculum. Though connectivity problems pre-empted any program delivery the first year of equipment access, the Monument Center has conducted approximately 15 programs for various classes in schools around the state.</p>	<p>The Mammoth Site of Hot Springs, SD</p> <p>Mount Rushmore National Monument, National Park Service, U.S. Department of the Interior, Keystone, SD</p> <p>The Outdoor Campus, Outdoor Skills Learning and Nature Center, South Dakota Department of Game, Fish and Parks, Pierre, SD</p> <p>U.S. Department of Agriculture Forest Service, Black Hills National Forest, Custer, SD</p> <p>Washington Pavilion of Arts and Sciences, Sioux Falls, SD</p>	<ul style="list-style-type: none"> <li>• Kris Thompson, In-Situ Bonebed Curator/ Educator/Geologist, the Mammoth Site at Hot Springs</li> <li>• Sharon McClain, Elementary Educator, the Mammoth Site at Hot Springs</li> <li>• Jim Popavich-Chief of Interpretation, Mount Rushmore National Memorial</li> <li>• Kay Gannon-the Outdoor Campus, South Dakota Division of Game, Fish and Parks.</li> <li>• Amy Ballard, Black Hills National Forest</li> <li>• Ellen Winberg, Teacher, Madison Central School District</li> <li>• Ruth Assmus, Teacher, Madison Central School District</li> <li>• Heather Gornick Jorgensen, Programs Coordinator Washington Pavilion of</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p><b>The Outdoor Campus</b>  The Outdoor Campus is the Educational Outreach program of the South Dakota Division of Game, Fish and Parks. DDN equipment was received in Jan. 2003, and programming began in March, 2003. The programming is a fixed series of three 45-minute videoconference sessions on <i>Our Winged Friends: Bats</i> in March, <i>Birds</i> in April, and <i>Butterflies</i> in May. Each session is offered twice and is aimed at the K-2 levels. This series has been offered to over 200 children in South Dakota classes. Recently, the Outdoor Campus has used the DDN to provide a one-credit teacher development course called <i>Project Learning Tree</i> focusing on environmental education. The course currently has 16 teachers at the host site and 36 teachers bridged via the DDN at remote sites during the dates March 4, 11, and 25, 2004.</p> <p><b>USDA Forest Service</b>  The Forest Service received their DDN equipment in the Fall of 2003 and offered their first programming in the winter of 2003. Four lessons are offered, two having to do with fire ecology and two focused on plant ecology. All lessons target the middle school (grades 6-8) level. To date, DDN bridges have been made to over 1,000 students in 20 schools in the winter and fall of 2003. Furthermore, the Forest Service has been able to expand their programming and constituents' interest in national grassland issues.</p> <p><b>Washington Pavilion</b>  To date, the Pavilion has provided programming to 331 students in 15 schools. All three of the curriculum packages they offer are science related, two at the middle school level, and one at the 4<sup>th</sup> grade level. Through their DDN programs, the Pavilion Learning Adventures Division has been able to reach new communities they weren't reaching before. What has been a pleasant surprise is the commitment they've seen from rural schools provide quality arts and science education for their students.</p> <p><b>Opportunities</b>  There are several unique effects that have emerged from the installation of DDN systems in South Dakota's park and museum facilities. One obvious outcome is that these facilities have reached new populations of patrons in the classroom. These students who are participating in park and museum programming are what educators at the <i>Mammoth Site At Hot Springs</i> call their "constituency of the next generation." Clearly, the interactive video systems have allowed these organizations to "reach out to students too far away to visit" the facility, while instilling a desire to come when the opportunity arises.</p>		Arts and Science

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>Also, having interactive video capability at their facilities is leverage for these organizations to access dollars from other grant programs. For instance, the Mammoth Site uses Institute for Museum Library Studies funds to support curriculum development. And, a <i>Parks as Classroom</i> grant from the National Park Service has been secured by the South Dakota Department of Game, Fish and Parks to develop video segments for delivery via the DDN and at other facility venues.</p> <p>As a result of the increased capacity via the DDN to educate citizens on the natural, historical, and artistic resources in our state, these funded organizations are discovering outcomes directly related to their mission. For instance, the educational coordinator at the Outdoor Campus indicates that participants in their programs are “developing a sensitivity and respect for the habitat and wildlife in South Dakota.”</p> <p>The interactive video equipment and access to the DDN has also helped organizations develop new partnerships that have not closely existed in the state. Those renewed/improved relationships include the SD Department of Education, and educational consortia around the state. With these consortia, organizations like the Forest Service can initiate teacher development programs to “develop teacher skills to conduct the same learning programs and activities that we do.”</p> <p>Teachers whose classes are participating in these programs also find the activities well organized. One elementary school teacher from Madison adds, “The information the Mammoth site offered could easily have been way above the students’ level. But the staff adjusted nicely to their needs. They had a lot of hands-on activities with the advanced materials they sent and kept the kids interested and involved.” These teachers also agree that the learning activities are closely tied to content and disciplinary standards so that teachers know exactly what learning outcomes are supported by the interactions.</p> <p><b>Challenges</b>  The challenges that existed related mostly to the operation of the technology. A few sites indicated not having sufficient training to operate the technology the lack of which delayed the delivery of programming to their audiences. Besides a lack of technical training in running the system, one site received faulty equipment, and another site did not have a data line that was compatible with the broadband connectivity the DDN equipment required. When there was a need for technical assistance, it was provided in a courteous and helpful</p>		



Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>way. But, the key problem was access to the right expertise for the right problem. The lack of a “point person” to serve as a liaison to technology support agencies in the state was problematic. The sentiments of two museum/park personnel are summarized in this statement, “We knew the value of the program and taught ourselves. State folks really didn’t know how to use it [DDN equipment] that well. Still, we would have liked someone from the state to provide collaboration on what is good delivery of instruction in using this technology.” Two others who were specifically asked about their interactions with SDADE indicated that the training was sufficient. Furthermore, they added, “SDADE was adaptable with the way we used the funds and were flexible with our developments in programming.”</p> <p>There were also reports of an occasional mis-scheduled bridge between museums/parks and schools that were traced to the bridging facility in Mitchell. Other scheduling problems occurred when elementary classes attempted to reserve the DDN equipment only to find high school students taking classes provided by remote vendors were using it many hours of the day. Often, only one or two high school students were enrolled in the class, which pre-empted other interactions that would have been of benefit to classes of students in elementary grades.</p> <p>A significant barrier also existed in the teacher’s inability to use the DDN equipment at the school end. On some occasions, bridges were made to schools where neither the teacher nor the technology coordinator knew how to operate the system. This resulted in interactions that were severely limited.</p> <p>Perhaps the single biggest concern expressed by at least three of the agencies is being able to pay for the line charges required to use the DDN. With line fees that will run into the thousands of dollars a year, these museums, activity centers, and park services are not sure that they’ve had and used the technology long enough to convince administrators in their organizations that continued operation of the system is worth the costs. More time appears necessary to institutionalize this service and study the data on the extent of good it provides.</p>		
<b>3.1b</b>	Several activities conducted by the SD Department of Education combine to respond to the grant objectives 3.1b and 3.3a. Generally, these objectives seek to place telecommunications and other wireless technologies into select classrooms to enhance the	Mount Vernon School District	<ul style="list-style-type: none"> <li>Shannon Amiotte, Office of Curriculum, Technology &amp;</li> </ul>

Objective	Activity Status Report		Agents/Contractors	Information Sources									
Provide funds to upgrade DNN classrooms to several schools that are identified as leaders in offering distance education courses	learning opportunities for the students and explore the possibilities of distributed technology use when it is put in the hands of competent educators with a sound plan.  In total, 25 projects were funded in 15 separate districts. Each prospective awardee was required to submit a proposal detailing the learning goals for the proposed curriculum, the current resources on hand, the capacity of the teacher to develop and deliver technology supported learning experiences, and a learning theory supported development approach. The technology tools granted to these award recipients include:  <table><tr><td>Combo Lab, Handhelds and Wireless Laptops</td><td>Awarded: 6</td><td>Award rate: 66%</td></tr><tr><td>Wireless Laptop Labs</td><td>Awarded: 8</td><td>Award rate: 80%</td></tr><tr><td>Handheld computers</td><td>Awarded: 11</td><td>Award rate: 73%</td></tr></table>		Combo Lab, Handhelds and Wireless Laptops	Awarded: 6	Award rate: 66%	Wireless Laptop Labs	Awarded: 8	Award rate: 80%	Handheld computers	Awarded: 11	Award rate: 73%	Clark School District  Ethan School District  Hill City School District  Menno School District  Wall School District  Sioux Falls School District  Aberdeen School District  Dell Rapids School District  Eureka School District  Faith School District  Groton School District  Madison Central School District  Meade School District  Yankton School District	Assessment, SD Department of Education  • Rita Hitchcock, Office of Curriculum, Technology & Assessment, SD Department of Education  • Al Beirschbach, Teacher, Madison Central School District  • Mary Williams, Teacher, Wall School District  • Betsy Knodel, Teacher, Menno Public School  • Bob Brown, Teacher, Aberdeen School District  • Darla Kotrba, Teacher, Ethan School District  • Kristen Gonsoir, Teacher, Groton School District
Combo Lab, Handhelds and Wireless Laptops	Awarded: 6	Award rate: 66%											
Wireless Laptop Labs	Awarded: 8	Award rate: 80%											
Handheld computers	Awarded: 11	Award rate: 73%											
3.3a  Assist schools to expand their telecommunications networks, especially remote schools not connected to the DDN	The allocation of awards is weighted toward the high school level, although all levels are represented: 15 (60%) of the awards went to the high school level, 3 (12%) to the middle school level, and 7 (28%) to the elementary level. Most elementary units are interdisciplinary. Most high school units address a single academic discipline. The most frequent content areas addressed are Language Arts and Science. There is also a fairly even distribution of the awards between rural schools and their counterparts from larger areas. The units that these educators developed are documented and showcased at: <a href="http://www.state.sd.us/deca/ddn4learning/statewide/sdade/wirelesshandheld/index.htm">http://www.state.sd.us/deca/ddn4learning/statewide/sdade/wirelesshandheld/index.htm</a> .  The project participants we talked to all said they felt very supported on this project by the staff at the State Department of Education Department of Curriculum, Technology and Assessment. Questions to the department were always addressed quickly, and all concerns were dealt with in a timely manner. Teachers appreciated the flexibility of the department in allowing for adjustments to project timelines and curriculum changes when necessary.  <b>Challenges</b> If there were concerns, they were generally curriculum related, and reflected the thinking of teachers who bound to produce a better version of the projects for the next go around. One handicap a couple of teachers mentioned was the timing of the request for proposals and subsequent awarding of the grants. The fact that award announcements were made later then projected delayed the acquisition of the technology and subsequent implementation of the technology-supported curriculum well into the school year. Teachers suggest a more timely release that accounts for these delays.												

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p><b>Opportunities</b>  When teachers talk about some of the opportunities and successes that arose from this work, they identified two primary areas: personal professional development, and student learning outcomes.</p> <p>One of the opportunities that these grants provided was the chance for teachers to work as teams on the curriculum projects. Though teaching is often done in isolation of professional peers, these teachers appreciated the collaboration that resulted from these projects. Teachers were also eager to apply recent technology to learning experiences in ways that helped them and their students “stay current” with new technological innovations. One teacher indicates that the professional development occurring for her was the improved awareness as to what students as young as third grade are able to do with technology tools. True to that theme, a high school teacher from Madison notes, “Kids are more creative than you originally plan them to be and you can take your design to another level.” One teacher indicates that the project was an eye opener for the administrators in her district including school board members, who discovered “what can be accomplished when teachers are empowered to design a timeline with project goals and measurable objectives.” Even the grant writing process itself, one teacher indicates, helped her to gain an understanding of the connection that reading and writing has for her students.</p> <p>When discussing student-learning outcomes, one teacher spoke to the authenticity of the project curriculum that lets students work with real data in real-life activities that could not be done as well without the technology. This teacher says that students are actively engaged in their tasks, which transpired to less discipline problems and more learning. Nearly every teacher queried agreed that besides the benefits in content learning the project encouraged, students also learned how to use new applications that they were able to apply to their work in other classes. In describing her students’ reactions to the curriculum activities supported by the grant, this middle school teacher from Ethan states, “I knew they would be excited and engaged in the learning process, but their excitement for it far surpassed my expectations.”</p> <p>Finally, one project titled “Inventors” developed by a team of teachers from Wall Elementary School, was showcased to a standing room only crowd and had media coverage</p>		

Objective	Activity Status Report	Agents/Contractors	Information Sources
	from the Rapid City TV station, newspaper and the local paper. The teachers involved describe the project as “wonderful for connecting to our parents and community.”		
<b>3.2b</b>  Identify private sector partners to provide on line education resources for SD teachers	<p>The South Dakota Department of Education formed several partnerships with external organizations to extend program offerings for schools. They include Colonial Williamsburg, National Science Center, StarNet, StepStar, Puppetry for the Arts, Vibrant C-Lynne Reid Banks, Museum of Science and Industry, Black Hills Smart Center, and SD-US Army Art.</p> <p><b>StarNet</b> is a leader in distance learning with over eighteen years' experience, beginning in 1985 in response to Texas school districts seeking ways to cost-effectively expand their curriculum, StarNet is currently represented in over 30 states as a leader in blended distance learning technologies using live, interactive satellite broadcasts with CD-ROM and web-based integration. South Dakota educators have access to Star Net professional development offerings throughout the year. These offerings are organized under the following strands:</p> <ul style="list-style-type: none"> <li>• <b>Brain Research</b></li> <li>• <b>Curriculum &amp; Instruction/Engaged Learning</b></li> <li>• <b>Health</b></li> <li>• <b>Leadership</b></li> <li>• <b>Real Coaching</b></li> <li>• <b>Technology Enabled Learning</b></li> </ul> <p>A calendar of monthly professional development opportunities throughout the 2003-2004 school year is made available to educators at <a href="http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/pdcalendar/index.htm">http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/pdcalendar/index.htm</a></p> <p>Online registration is available at <a href="http://www.state.sd.us/deca/DDNOnline/default.asp">http://www.state.sd.us/deca/DDNOnline/default.asp</a></p> <p>The Office of Curriculum, Technology &amp; Assessment, SD Department of Education tracks the number of participants and evaluation data for each offering. This information is used for making decisions about program continuation and expansion. Data provided by the SD DOE lists 194 registered participants for 55 different program offerings.</p> <p><b>STEP Star</b> is a “distance learning” network providing interactive classroom instruction through the use of television, computers, the Internet and other technologies. Course</p>	Office of Curriculum, Technology & Assessment, SD Department of Education	<ul style="list-style-type: none"> <li>• Rita Hitchcock, Office of Curriculum, Technology &amp; Assessment, SD Department of Education</li> <li>• DDN4Learning Website <a href="http://www.state.sd.us/deca/DDN4Learning/statewide/index.htm">http://www.state.sd.us/deca/DDN4Learning/statewide/index.htm</a></li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>companion Web sites offer additional information, resources, and extension activities. The network offers an array of programs geared to all ages and levels of ability including elementary through secondary education, alternative education, adult basic education, literacy programming, and professional development. All courses are taught by Washington State certified teachers or community college instructors.</p> <p>Full distance education courses, as well as events with a series of sessions are available to South Dakota students through the STEP Star partnership.</p> <p>Through partnerships with other organizations named previously the hosting of many one time event and course offerings has been possible. Program listings are for one time events are available at  <a href="http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/OneTime/index.htm">http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/OneTime/index.htm</a>; k-8 classes are listed at  <a href="http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/K8/index.htm">http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/K8/index.htm</a> and k-12 series at  <a href="http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/series/index.htm">http://www.state.sd.us/deca/DDN4Learning/ProgramGuide/series/index.htm</a></p> <p>Through online surveys and informal feedback processes, the Office of Curriculum, Technology &amp; Assessment, SD Department of Education collects data relevant for assisting them in making decisions concerning adjustments to the one time event and course offerings provided through these partnerships. Some of the opportunities for improvement in the delivery of distance education courses suggested by survey data include technical issues relative to access, including not getting connected for a conference, delayed connection for a conference, losing connection during a conference, poor quality video and audio. A second category for improvement related to equipment operation, including volume control and operation of the mute feature. The third category for improvement related to instruction and included pre-class preparation in the distribution of materials, the need for instructional techniques to increase interactivity among students and adequate time for completing lesson activities.</p>		
<p><b>3.3b</b></p> <p>Identify partners to</p>	<p>Partners identified under this objective are the museums, park services, and other funded organizations that have received room-based interactive video equipment from SDADE. Those partners include the Mammoth Site at Hot Springs, Mount Rushmore, the Outdoor Campus, USDA Forest Service, and the Washington Pavilion in Sioux Falls all of whom have developed instructional programming for delivery to schools.</p>	<p>Parks, Science Centers, and Museums: Mammoth Site at Hot Springs, Mount Rushmore, the Outdoor</p>	<ul style="list-style-type: none"> <li>Shannon Amiotte, Office of Curriculum, Technology &amp; Assessment, SD</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
<p>assist schools in using DDN more effectively</p>	<p>To build the capacity of educators to use room-base digital equipment, awards were made to the five SD public universities to establish DDN classrooms dedicated for teacher training on room based video interactions within their Colleges of Education (as per SDADE project objectives 2.1a,c). Those five Colleges of Education are located at: BHSU, DSU, NSU, SDSU, and USD.</p> <p>The state has also involved Technology &amp; Innovations in Education (TIE) in Rapid City. TIE piloted video streaming as a tool to enhance the Discover SD curriculum and student learning. The short video segments that were developed in cooperation with another partner, the South Dakota Public Broadcasting network, support the SD Content Standards for Social Studies and feature reenactments of South Dakota historical characters that bring history to life.</p> <p>Also partnering with SDADE is the Dakota Interactive Academic Link (DIAL) Consortium of 33 southern tier school districts in promoting and expanding the use of the Digital Dakota Network for student learning. DIAL participated in the development of DDN promotional materials and the development of the assessment tool kit.</p> <p>The South Dakota Alliance of Distance Education has also partnered with StarNet, a nationally recognized organization, to provide distance delivered content to the state. Teachers can choose to participate in over 150 hours of professional development programming each year ranging from data-driven decision making to improve student/teacher interaction. For students, there are 20 courses available and over 120 hours of student enrichment programming as a rich classroom resource for teachers.</p> <p>SDADE, through the Dakota Interactive Academic Link (DIAL) has also supported the activities of the <i>Center for Women</i> at the University of Sioux Falls, and the South Dakota Small DIAL under their <i>Business Success Activities</i> initiative, which focuses on promoting entrepreneurship in rural South Dakota.</p>	<p>Campus, USDA Forest Service, and the Washington Pavilion in Sioux Falls.</p> <p>South Dakota Colleges of Education: Black Hills State University, Dakota State University, Northern State University, South Dakota State University, and the University of South Dakota.</p> <p>Dakota Interactive Academic Link (DIAL) Consortium, Platte, SD</p>	<p>Department of Education</p> <ul style="list-style-type: none"> <li>• South Dakota Alliance for Distance Education web site; <a href="http://www.state.sd.us/deca/ddn4learning/statewide/sdade/index.htm">http://www.state.sd.us/deca/ddn4learning/statewide/sdade/index.htm</a></li> <li>• Dr. Tricia Cole Interim Director, Center for Women University of Sioux Falls 1101 W. 22<sup>nd</sup> St. Sioux Falls, SD 57042</li> <li>• Darla Newborg U.S. Small Business Administration South Dakota Business Office 110 S. Phillips Ave. # 200 Sioux Falls, SD 57104 605-330-4243</li> </ul>
<p><b>3.3c</b></p> <p>Initiate a pilot program</p>	<p>In September, 2003 this element of the project expanded to a two-track system involving an entry level for associate degree participants, and an accelerated level for inservice school personnel. The focus from an associate to graduate level expanded when organizers determined that building network administration and technology coordination capacity in</p>	<p>Mitchell Technical Institute, Mitchell, SD</p> <p>Dakota Interactive</p>	<ul style="list-style-type: none"> <li>• Tracy Vik, DDN-IT Curriculum Coordinator/Instructor, Dakota Interactive Academic</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
<p>leading to an Associate of Arts degree to prepare technical support personnel for the DDN</p>	<p>certified teachers would be an important way to apply needed technological expertise in schools.</p> <p>Taking the name, DDN-IT (Digital Dakota Network—Information Technologies), the program removes the focus on “academy” which described the “Technology for Teaching and Learning” professional development technology readiness training of the last five years. DDN-IT is designed to provide more intensive and long-term skills development via coursework. Participants will enter the program at points relevant to their experience level. Coursework consists of five segments on topics ranging from networking fundamentals to technology leadership in schools.</p> <p>The effort has involved a number of individuals who represent a broad array of service organizations in the state including:</p> <ul style="list-style-type: none"> <li>• Mitchell Technical Institute (lead organizers/project oversight)</li> <li>• Dakota Interactive Academic Link (DIAL)</li> <li>• South Dakota Bureau of Information Technology (BIT)</li> <li>• South Dakota Department of Education</li> <li>• Dakota State University/K-12 Data Center</li> </ul> <p>For participants at the associate level, technical credit is offered through Mitchell Technical Institute. Both renewal and graduate credit are planned as incentives to encourage inservice teachers to enroll in the program. Program entry dates are slated for early summer 2005. The brief timeline that follows documents major activities of the project.</p> <p>August 31, 2003: Conference call with representatives of the State K-12 Data Center (Mike Waldner), and program organizers Dan Muck and Tracy Vik to overview program activities and outline instructional needs.</p> <p>Sept. 15, 2003: Development team meets again—ongoing program development work.</p> <p>October 7, 2003: Conference call with state representatives—development team informed that professional development program for teachers of the last five years (TTL) will be discontinued. DDN-IT will be state effort building</p>	<p>Academic Link, Platte, SD</p>	<p>Link (DIAL), Platte, SD</p> <ul style="list-style-type: none"> <li>• Dan Muck, Director, Digital Dakota Network, Mitchell Technical Institute, Mitchell, SD</li> <li>• Michael Waldner, Director, K-12 Data Center, Dakota State University, Madison, SD</li> <li>• Dr. Cecelia Wittmeyer, Academic Vice President, Dakota State University, Madison, SD</li> <li>• Dr. David Zolnowsky, Director of Computing Services, Dakota State University, Madison, SD</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>technical assistance capacity in schools.</p> <p>October, 2003: Team sets up and secures program web site <a href="http://ddnit.k12.sd.us">http://ddnit.k12.sd.us</a> hosted at the K-12 Data Center.</p> <p>Dec. 8, 2003: Dan Muck (MTI) and Tracy Vik (DIAL) meet with Dakota State University contingent including President Jerald Tunheim and VP Cecelia Wittmeyer to discuss graduate credit delivery for DDN-IT courses. DSU outlines a process for obtaining regental approval for collaboration and course delivery that fits MTI's timeline. DSU enters the DDN-IT partnership as collaborator and co-course developer.</p> <p>Dec. 17, 2004: The DDN-IT course development process continued with DSU's review of course syllabi. Feedback provided in two stages of revision.</p> <p>Jan. 13, 2004: Third review of syllabi is conducted. Minor suggestions for revision provided.</p> <p>Jan. 20, 2004: Development team meets to discuss curricular, organizational and logistical items. A working meeting with DSU reps is held to finalize course syllabus and review regental policy regarding delivery of courses, course numbering, terms of instruction, etc. Dan Muck asks for confidentiality of these plans to maximize the interest in the program when it is later announced. A general timeline is set for gaining final institutional approvals.</p> <p>Jan. 29, 2004: DSU's Graduate Studies in Educational Technology Program Committee approves DDN-IT collaborative course delivery.</p> <p>Feb. 2, 2004: DSU's Graduate Council approves Tracy Vik for associate member of the graduate faculty as DDN-IT course instructor of record.</p> <p>Feb. 12, 2004: Professional services agreement between DSU and DDN-IT (Dan Muck, project leader) is delivered identifying terms for graduate credit and course transferability.</p>		



Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>March 2, 2004: Press release officially announcing DDN-IT and inviting applications for participation.</p> <p>April 19, 2004 Informational meeting for potential program participants at Technology Innovations in Education (TIE) Conference, Sioux Falls, SD.</p> <p>April 26, 2004: Courses for DDN-IT participants officially begin.</p>		
<p><b>4.4a</b></p> <p>Offer support to partnerships of teacher groups for developing exemplary assessment strategies for DE</p>	<p>During the 2002-2003 implementation year of the SDADE Project, a focus on exemplary assessment strategies for distance education was initiated. Work on parts one and two of Objective 4.4a continued during the 2003-2004 year, resulting in an “Assessment Toolkit”. The Toolkit is organized under the following four-categories:</p> <ul style="list-style-type: none"> <li>• On-Line Assessment Tools</li> <li>• Readiness Tools</li> <li>• Rubric Sites</li> <li>• Resource Sites</li> </ul> <p><b>On-Line Assessment Tools:</b> a variety of resources for assisting teachers with assessment, including online tools for creating, administering and grading quizzes; online tools for creating activities, games, and web pages; online tools for designing, administering and analyzing surveys; and online tools for promoting collaboration and cooperation among educators by enabling them to share expertise.</p> <p><b>Readiness Tools:</b> a sampling of tools for measuring student readiness for distance education, including a checklist of characteristics of self-directed learners; student learning style assessments; NEA standards for online courses; and the Learning with Technology Profile in which comparisons of instructional practices with indicators of engaged learning and high performing technology can be made.</p> <p><b>Rubric Sites:</b> Multiple websites for educators to increase their understanding of rubrics and their application to a variety of learning outcomes; online tools for designing and customizing student rubrics, in addition to assessing student progress on identified rubrics.</p> <p><b>Resource Sites:</b> A variety of sites to assist educators in learning more about student</p>	<p>Dakota Interactive Academic Link Consortia</p> <p>SD Department of Education, Office of Curriculum, Assessment and Technology</p> <p>Technology &amp; Innovations in Education, Rapid City, SD</p>	<ul style="list-style-type: none"> <li>• Shannon Amiotte, SDADE Project Manager, Office of Curriculum, Technology &amp; Assessment, SD Department of Education</li> <li>• Sarah Fridley, Interactive Learning Campus Project staff, DIAL</li> <li>• Marlene Rothermel, Education Technology Specialist, TIE</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	<p>assessment, including performance-based assessment and assessment of students in video conferencing distance learning environments.</p> <p>It is the intent of staff responsible for Objective 4.4a to continue to add to the resources currently established in this "Assessment Toolkit".</p>		
<b>4.4b</b>  Collect and make available online a variety of assessment resources	<p>Objectives 4.4a and 4.4b were combined as project implementation progressed. The original plan for implementing these objectives shifted from a more comprehensive and inclusive approach involving practitioners to the formation of a smaller work group of educators. SDADE project leaders determined that the first step in providing assistance to educators relative to student assessment was to organize available resources. Additional training and assistance on the application of assessment strategies for distance education remains a priority and it is hoped that through on-going distance education efforts this work can evolve.</p>		
<b>5.1a</b>  Offer action research funds to teachers to support scientific research of the DDN	<p>A request for proposals was prepared by the ITDE program staff and distributed to teachers, administrators, professors and graduate students in South Dakota during the fall of 2001. This request was to identify researchers who were interested in investigating some aspect of distance education in South Dakota. There was a special emphasis placed on action research that dealt with local issues of interest to the teachers of South Dakota.</p> <p>Proposals were reviewed and a number were selected for funding. During the spring and early summer of 2002, action research was conducted. Several meetings of the researchers were held and final reports were prepared. Finally, the research reports were edited and compiled into this revised <u>Encyclopedia</u>.</p> <p>Fall 2003, one additional action research project was funded. Doreen Gosmire and Marita Barcoff, DIAL and USD were the recipients. Their project is slated for completion March 31, 2004 and will be added to the Encyclopedia of Distance Education Research currently posted to the DDN4 Learning Website at <a href="http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm">http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm</a></p>	<p>Doreen Gosmire, Project Director, Interactive Learning Campus, Dakota Interactive Academic Link Consortia</p> <p>Marita Barcoff, Graduate student, University of South Dakota</p>	<ul style="list-style-type: none"> <li>• Shannon Amiotte, SDADE Project Manager, Office of Curriculum, Assessment and Technology, SD DOE</li> <li>• Doreen Gosmire, Project Director, Interactive Learning Campus, DIAL</li> <li>• Marita Barcoff, Graduate student, USD</li> </ul>
<b>5.2a</b>  Collect	<p>Evaluation of the South Dakota Alliance of Distance Education (SDADE), supported by the federally funded Star Schools program and implemented by the South Dakota State Department of Education, has been ongoing since the notification of the award in July,</p>	<p>Dr. Michael Simonson, Lead Evaluator, Technology, Research,</p>	

Objective	Activity Status Report	Agents/Contractors	Information Sources
comprehensive evaluation data about SDADE and DDN	<p>2001. The evaluation team applied an evaluation model that was both formative and summative. Formative to make it possible for SDADE personnel to adjust aspects of the program as needed. And summative, to understand some of the more enduring outcomes of the initiative in terms of partnerships, teacher professional development, student learning, and improved organizational capacity to administer and operate in a distributed learning environment.</p> <p>The evaluation was built around the AEIOU approach (Accountability, Effectiveness, Impact, Organizational Context, and Unanticipated consequences). Each program objective and its subparts were subjected to this lens of inquiry. An array of data collection methods were applied that are both qualitative and quantitative. As the project began to wind down its final phases, a three-member meta-evaluation panel (independent of the evaluation team) reviewed the evaluation methods and data to determine what information, if any, might still need to be collected on the project, and if the appropriate data analysis and interpretation methods were consistent with the findings. A final evaluation report was completed in June of 2003.</p> <p>An addendum to that evaluation was completed in March, 2004. The addendum to the evaluation (this document) provides auditory information on the completion of 17 final program sub-objectives that SDADE received an extension to complete.</p>	<p>and Evaluation Systems, Nova Southeastern University, Cooper City, FL</p> <p>Dr. Mark Hawkes, Project Evaluator, Dakota State University, Madison, SD</p> <p>Ms. Gloria Steele, Project Evaluator, Technology and Innovations in Education, Rapid City, SD</p>	
<p><b>5.3a</b></p> <p>Review SDADE funded action research and publish summary of each project</p>	<p>A request for proposals was prepared by the ITDE program staff and distributed to teachers, administrators, professors and graduate students in South Dakota during the fall of 2001. This request was to identify researchers who were interested in investigating some aspect of distance education in South Dakota. There was a special emphasis placed on action research that dealt with local issues of interest to the teachers of South Dakota.</p> <p>Proposals were reviewed and a number were selected for funding. During the spring and early summer of 2002, action research was conducted. Several meetings of the researchers were held and final reports were prepared. Finally, the research reports were edited and compiled into this revised <a href="#">Encyclopedia</a>.</p> <p>Fall 2003, one additional action research project was funded. Doreen Gosmire and Marita Barcoff, DIAL and USD were the recipients. The details of their action research project and the completed product were not available within the timeline for this report. Their</p>	<p>Doreen Gosmire, Project Director, Interactive Learning Campus, Dakota Interactive Academic Link Consortia</p> <p>Marita Barcoff, Graduate student, University of South Dakota</p>	<ul style="list-style-type: none"> <li>• Shannon Amiotte, SDADE Project Manager, Office of Curriculum, Assessment and Technology, SD DOE</li> <li>• Doreen Gosmire, Project Director, Interactive Learning Campus, DIAL</li> <li>• Marita Barcoff, Graduate student, USD</li> </ul>

Objective	Activity Status Report	Agents/Contractors	Information Sources
	project is slated for completion March 31, 2004, at which time it will be reviewed and included in the Encyclopedia of Distance Education Research currently posted to the DDN4 Learning Website at <a href="http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm">http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm</a>		
<b>5.3c</b>  Publish results of evaluation and research activities conducted in SD	The final action research project funded by the SDADE Project will be added to the Encyclopedia of Distance Education Research currently posted to the DDN4 Learning Website at <a href="http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm">http://www.state.sd.us/deca/DDN4Learning/statewide/SDADE/ar/online.htm</a> sometime after completion on March 31, 2004.	Doreen Gosmire, Project Director, Interactive Learning Campus, Dakota Interactive Academic Link Consortia  Marita Barcoff, Graduate student, University of South Dakota	<ul style="list-style-type: none"> <li>• Shannon Amiotte, SDADE Project Manager, Office of Curriculum, Assessment and Technology, SD DOE</li> <li>• Doreen Gosmire, Project Director, Interactive Learning Campus, DIAL</li> <li>• Marita Barcoff, Graduate student, USD</li> </ul>

### Summary

The South Dakota Alliance for Distance Education (SDADE) funded by the US Department of Education Star Schools program proposed to implement and attain six goals through supporting objectives and activities. South Dakota began the establishment of the Digital Dakota Network (DDN) in 1999 and the timely awarding of funding for the SDADE Project in July 2001, provided both fiscal resources and strategic direction for building the capacity of South Dakota educators and community members to utilize the distance learning system.

The SDADE final evaluation report, completed June 2003, and the SDADE addendum completed March 2004 documents progress made in the attainment of individual project goals and objectives. Of the objectives addressed in the evaluation addendum, we report that all activities have been completed, or are in the process of completion with funds encumbered to meet specified program objectives. Remaining activities in process include:

- The printing and distribution of promotional/instructional materials (Obj. 1.1b)
- The “Technology and Innovations in Education” conference which is the most recent in a series of several conference/expo SDADE collaborative events to promote distance learning in the state (Obj. 2.2a).
- The development of a program to prepare technical support personnel for the DDN. This effort is organized, curriculum is approved, and courses start on April 26.

Throughout the scope of the project, the impact of activities on South Dakota educators through connection, communication, collaboration, coordination, and curriculum development is significant and worthy of discussion. The state now has a dense interconnection of participants and collaborators in distance education events. These networks have improved the access of South Dakota Schools, primarily those in rural areas, to a rich array of resources otherwise inaccessible to rural learners.

Communication among K-20 educators and the community increased as a result of the SDADE Project through sharing of information, issues and concerns focused on distance education in South Dakota. The development of promotional materials and their use in marketing DDN in South Dakota serves as a vehicle for familiarizing South Dakotans with the DDN system and the concept of distance education. This communication effort fosters greater understanding and acceptance of distance education by South Dakotans.

As representatives of K-20 education engaged in curriculum development initiatives new connections were made with fellow educators across the state and collaboration and sharing extended across grade levels. Educators express their appreciation for the opportunities to learn from one another, become better prepared to effectively teach via distance learning systems and benefit from a support system made possible through the SDADE curriculum development work.

Establishing a system for coordinating distance education programming and activities was accomplished through the DDN clearinghouse and interactive features of the DDN website. It is hoped that through these coordination efforts, participating organizations will be able to avoid redundancy, work more efficiently and increase synergy around distance education opportunities.

The work accomplished through the SDADE project has made a significant contribution to increased awareness and use of distance learning systems by educators and community members across South Dakota.